

Remarks

- 1) Claims 1,3,8-15, and 17-25 are pending in the application, and stand finally rejected. Limitations of cancelled claims have been incorporated in the respective independent claims.
- 2) The present invention is directed to a cluster server, as was defined in paragraphs [02] and elsewhere, where a packet is sent from a client to a first server, and if for any reason this server is not the server to handle the packet, the server utilizes a redirection database to provide an address of a server capable of performing the service. The first server returns the SAME PACKET (i.e. a series of bits that contain the same transmitted payload), together with a redirection header. The redirection header contains at least one flag to indicate to the client that the redirection should be made once, permanently, or for a limited time. The client is constructed to distinguish such header and to act thereupon. Those distinctions, including the difference between them and the cited art, were clearly made, not only in the original application as filed, but also in the response to the first office action.
- 3) Applicant protests the Office complete failure to substantially relate to the arguments raised in the amendment filed Feb. 28, 2005. Applicant directs the Office's attention to MPEP 2143.03 which requires all claim limitations to be taught or suggested. The Office failed to specifically show ANY HINT OR TEACHING in the references, separately or in combination, which disclose that the SAME PACKET AND A REROUTING HEADER ARE TRANSMITTED BACK TO THE SOURCE ADDRESS. (i.e. the Office failed to show all claim limitations, see In re Royka, 490 F.2d 981) The Office did not relate to this point in any substantive manner. Furthermore, in relation to the argument that McCanne DOES NOT TEACH A SERVER CLUSTER as clearly and specifically defined in the present application, the Office provided merely an unsubstantiated response that the position of the Examiner is that McCanne teaches a method of

rerouting network traffic operating in conjunction with a server cluster".

Applicant has used the ordinary and customary meaning of the term "cluster server" as will be cleared to the one skilled in the art. The Examiner provided a far broader and expansive meaning of this term than the ordinary meaning, to the content distribution system or the network address translating environment to which the cited references relate. However, applicant clearly and distinctly differentiated between the examiner broad interpretation and a server cluster that provides high reliability, and offers redundancy, fault tolerance and scalability. Applicant made the distinction both in the specifications as filed, and in the amendment. Applicant respectfully reminds the Office that the applicant may act as his own lexicographer (MPEP2173.01), and that *"Importantly, the person of ordinary skill in the art is deemed to read the claim term not only in the context of the particular claim in which the disputed term appears, but in the context of the entire patent, including the specification."* and *"a patent applicant may consistently and clearly use a term in a manner either more or less expansive than its general usage in the relevant community, and thus expand or limit the scope of the term in the context of the patent"* (Collegenet Inc. v. Applyyourself Inc., CAFC 04-1202,-1222,-1251). Thus the Examiner should have given the term server cluster an interpretation consistent with both by using the ordinary and customary meaning of the term, and by specific definition, none of which is present in any form in the cited art.

- 4) Applicant requests AGAIN that the office will **DISTINCTLY AND SPECIFICALLY** point out where in the cited references the limitations of returning the same packet to the client, and of operating within a server cluster exist in any of the cited references, or reconsider and withdraw the rejection.
- 5) Applicant amended claim 1 to further show that the first server and the second server both belong to the same server cluster, and each has a unique internet address. The section the Office used to reject claim 1 relates to a DNS service. The operation of a server cluster distinctly differs from that of a DNS server.

Whereas the DNS server receives a query obtaining a name, and returns an address equivalently representing the requested name. The DNS server does NOT require the return address to be in the same server as the DNS server, neither is such arrangement taught by McCanne. The server cluster of the present invention comprises at least two separate servers – the claimed first and second servers, that belong to a single entity, called a server cluster, which is defined to provide redundancy. In the present invention, as claimed in claim 1, the first server indicates to the client that the service request originally directed to it should be directed to a second address within the server cluster. The redirection is not performed by intercepting the communication packets and redirecting them from the first server directly to a second server, but rather by instructing the client to redirect the request to the second server in the cluster, represented by the service address. Again such feature is not disclosed, suggested, or hinted in any of the cited references, which do not relate at all to a server cluster and which do not teach redirection to be carried out by the client.

- 6) Furthermore, applicant amended the claim to add the limitation of obtaining not merely a redirection address from the redirection database, but also obtaining at least one redirection flag, which shall be used by the client to indicate if redirection should occur, if the redirection is permanent or is it temporary, such as a one-time redirection, or that the client should redirect its service requests only until a lease (e.g. a DHCP lease of the client) expires. While the Office has taken the position that Albert's dispatch flag is somehow equivalent to the redirection flag. The Albert dispatch flag is described (Col. 16, ll. 27-31) as indicating *"whether the packet is to be dispatched to the forward IP address included in the fixed affinity"*. However Albert further clarifies that *"the difference between dispatched and directed traffic is that dispatched traffic is forwarded directly from a forwarding agent to a specific server without translating the destination IP address of the packet. Instead, a forwarding address contained in an affinity is used to forward the packet. If the connection is not dispatched but directed by the*

forwarding agent, then the packet IP destination must be translated using NAT if the packet is redirected to a specific server." Clearly the forwarding agent, rather than the client, performs the redirection, and therefore the dispatch flag directly teaches away from the present invention and does not disclose the permanent redirection flag claimed. Moreover, Albert further presents that *"Not setting the dispatch flag indicates that the packet is to be forwarded based on the address provided in the packet IP header."*(col. 16, ll. 44-45), again clearly not indicating any time limits of redirection. Furthermore The Office claimed that Col. 16, ll. 42-46, Albert discloses a flag indicating whether the client is expected to perform the redirection permanently to the service address. LL. 42-46 read: *"If forward IP address 608 is zero, then the packet is dropped after processing statistics as indicated by an information flag 606. Not setting the dispatch flag indicates that the packet is to be forwarded based on the address provided in the packet IP header."* Clearly, Albert does not relate in any form to a redirection performed by the client, permanently or otherwise. Neither does, as the Office claims, Albert discloses a redirection flag indicating that the client should continue redirection until a lease is expired. Instead, in Albert's Col. 25, ll66-7 and col. 26 ll. 1-4, Albert states: *"A copy flag 1068 also uses the same bit code as the interest mask. Each bit specifies whether a copy of the matching packet is to be forwarded to the server. If the bit is set for the packet type, the forwarding agent sends a copy of the matching packet and refers to a hold flag 1069 to determine what to do with the original packet. Hold flag 1069 also uses the same bit code as the interest mask. Hold flag 1069 determines whether the forwarding agent forwards the packet to the service manager or, if possible, holds the packet and waits for the service manager to send a fixed affinity that specifies how the packet should be forwarded by the forwarding agent. If the bit is not set for the packet type, then the forwarding agent forwards the packet. If the bit is set, then the forwarding agent holds the packet, if possible. If the packet cannot be held by the forwarding agent for some reason (e.g., lack of storage) then the forwarding agent forwards the packet to the Manager."* Nothing in the cited paragraph, nor elsewhere in

Albert, teaches that the client is to continue forwarding service requests to the second server until the expiration of any lease.

- 7) As none of the possible claimed flags exists in neither McCanne nor Albert, applicant overcame the prior art rejections that were directed to claims 1, 4, 5, 6, 7, and 8, the limitations of which were combined into claim 1 and all its dependent claims.
- 8) Applicant amended claim 15 to reflect that flags that the redirection happens between separate servers within the cluster, and that the redirection database contain flags similar to those of claim 1. By the same arguments provided for claim 1 above applicant submits that as neither McCanne nor Albert disclose any of the claimed flags the claim overcomes the prior art. Additionally, the claim is directed to a server cluster and neither Albert nor McCanne disclose a server cluster as clearly defined by applicant in paragraph [02] and others of the specifications. Furthermore, neither Albert nor McCanne teach a cluster server at all, nonetheless a cluster server architecture in which a receiver server indicates to the database that the server is able to handle specific client requests. As the Office failed to show the claimed limitations, the applicant overcame the cited prior art and the claims should be allowed.
- 9) Applicant amended claim 20 to show the flags similar to those claimed in claims 1 and 15. As the arguments regarding the flags presented in the comments for claims 1 and 15 similarly apply, and as none of the cited art discloses a client adapted to receive the original service request with the redirection header, applicant submits that the cited prior art has been overcome and that the claim is allowable.
- 10) The dependent claims are allowable in light of their containment of all the limitations of the independent claims, which were shown allowable in view of all the cited prior art.

- 11) Applicant has made a good faith effort to address each and every point made by the Examiner, and amended the claim in order to place the application in condition for allowance. Should the Examiner find any deficiency in this amendment or in the application, or should the Examiner believe for any reason, that a conversation with applicant's agent may further the allowance and issuance of this application, the Examiner is kindly requested to contact Shalom Wertsberger at telephone (207) 799-9733.
- 12) In light of the showing and all other reasons stated above, applicant believes that the rejection presented by the Examiner in the office action mailed to applicant June 17, 2005 were overcome and that the claims as amended are in condition for allowance. Reconsideration and withdrawal of the rejection and issue of a notice of allowance on all pending claims is solicited.

Respectfully Submitted



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